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EXAMINER

TORRES, JOSEPH D

ART UNIT	PAPER NUMBER
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2112

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11/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,090

Applicant(s)

LOHR ET AL.

Examiner

Joseph D. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-53 is/are pending in the application.
- 4a) Of the above claim(s) 51-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:06/15/2006,07/26/2006,04/04/2007.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 28-50 in the reply filed on 10/25/2007 is acknowledged. The traversal is on the ground(s) that "claim 52 incorporates the mobile station according to claim 41" (Note: the Applicant elects without traverse and then goes on to traverse). This is not found persuasive because independent claim 41 is directed to a mobile receiver and independent claim 52 is directed to a communication system and since claims cannot incorporate by reference that which is easily written into the claim, claim 52 cannot incorporate by reference the limitations of claim 41.

The requirement is still deemed proper and is therefore made FINAL.

Claims 51-53 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/25/2007.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 501-504 in Figure 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the

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description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. **The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.** The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the Abstract includes form and legal phraseology "said". Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 42, 44, 45, are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 42 recites no structural element further limiting the mobile station of claim 41, but instead recites a functional/step limitation for a method. Claim 44 recites no structural element further limiting the mobile station of claims 41 and 43, but instead recites a functional/step limitation for a method. Claim 45 recites no structural element further limiting the mobile station of claims 41, 43 and 44, but instead recites a functional/step limitation for a method. Claim 46 recites no structural element further limiting the mobile station of claim 41, but instead recites a functional/step limitation for a method. Claim 47 recites no structural element further limiting the mobile station of claim 41, but instead recites a functional/step limitation for a method. Claim 48 recites no structural element further limiting the mobile station of claims 41 and 47, but instead recites a functional/step limitation for a method. Claim 49 recites no structural element further limiting the mobile station of claims 41 and 47, but instead recites a functional/step limitation for a method. Claim 50 recites no structural element further limiting the mobile station of claim 41, but instead recites a functional/step limitation for a method.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 recites the limitation "the other data" in line 17. There is insufficient antecedent basis for this limitation in the claim since other data is optional.

Claim 41 recites the limitation "the other data" in line 17-18. There is insufficient antecedent basis for this limitation in the claim since other data is optional.

Claim 30 recites the limitation "the other data" in line 5. There is insufficient antecedent basis for this limitation in the claim since other data is optional.

Claim 43 recites the limitation "the other data" in line 5. There is insufficient antecedent basis for this limitation in the claim since other data is optional.

Claim 46 recites the limitation "the decreased gain factor" in line 2. There is insufficient antecedent basis for this limitation in the claim since other data is optional.

Claims 42, 44-46 and 48-50 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

Claim 42 recites no structural element further limiting the mobile station of claim 41, but instead recites a functional/step limitation for a method. The omitted structural cooperative relationships are: any connections to a structural element further limiting

claim 41 and the cooperative relationship between such a structural element and the structural elements in claim 41.

Claim 44 recites no structural element further limiting the mobile station of claims 41 and 43, but instead recites a functional/step limitation for a method. The omitted structural cooperative relationships are: any connection to a structural element further limiting claims 41 and 43, and the cooperative relationship between such a structural element and the structural elements in claims 41 and 43.

Claim 45 recites no structural element further limiting the mobile station of claims 41, 43 and 44, but instead recites a functional/step limitation for a method. The omitted structural cooperative relationships are: any connection to a structural element further limiting claims 41, 43 and 44, and the cooperative relationship between such a structural element and the structural elements in claims 41, 43 and 44.

Claim 46 recites no structural element further limiting the mobile station of claim 41, but instead recites a functional/step limitation for a method. The omitted structural cooperative relationships are: any connections to a structural element further limiting claim 41 and the cooperative relationship between such a structural element and the structural elements in claim 41.

Claim 48 recites no structural element further limiting the mobile station of claims 41 and 47, but instead recites a functional/step limitation for a method. The omitted structural cooperative relationships are: any connection to a structural element further limiting claims 41 and 47, and the cooperative relationship between such a structural element and the structural elements in claims 41 and 47.

Claim 49 recites no structural element further limiting the mobile station of claims 41 and 47, but instead recites a functional/step limitation for a method. The omitted structural cooperative relationships are: any connection to a structural element further limiting claims 41 and 47, and the cooperative relationship between such a structural element and the structural elements in claims 41 and 47.

Claim 50 recites no structural element further limiting the mobile station of claim 41, but instead recites a functional/step limitation for a method. The omitted structural cooperative relationships are: any connections to a structural element further limiting claim 41 and the cooperative relationship between such a structural element and the structural elements in claim 41.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 28-33, 37, 38, 41-46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over RAAF, BERNHARD (EP 1198076 A1) in view of Tripathi; Vinayak et al. (US 6671849 B2, hereafter referred to as Tripathi).

35 U.S.C. 103(a) rejection of claims 28 and 41.

RAAF teaches transmitting a data packet to the base station (Step 6 in line 35 on page 3 of RAAF), receiving a feedback message from the base station, wherein the feedback message indicates whether the data packet has been successfully received by the base station (lines 37-54 in RAAF teach an Acquisition Indicator AI whereby positive indicates that the data packet has been successfully received by the base station and negative indicates that it has not been successfully received by the base station), and in case the feedback message indicates that the data packet has not been decoded successfully, transmitting a retransmission data packet after a predetermined time span upon having received the feedback message and optionally other data within the same transmission time interval (Step 8 and 9 in lines 53-58 on page 3 of RAAF teach that in case the feedback message on AICH indicates that the data packet has not been received successfully in Step 8, transmitting a retransmission RACH data packet after a predetermined time span of 4 slots after the uplink slot upon having received the feedback message; Note: a RACH data packet includes preamble PRACH and optional data) using a maximum transmission power allowed to be used by the mobile terminal, if a transmission power required for transmitting the retransmission data packet and the other data is larger than the maximum allowed transmission power (lines 6-9 on page

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10 of RAAF), wherein the other data has a higher logical channel priority than the data of the retransmission data packet (lines 6-9 on page 10 and lines 37-43 on page 6 in RAAF teach preamble is transport format occurring at the lower physical layers transported in a lower physical channel CPCH whereas message data occurs at the upper transport/application layer and is transported on high level CSICH channels). However RAAF does not explicitly teach the specific use of decoding packets.

Tripathi, in an analogous art, teaches use of decoding packets (MAP Decoder 401 Figure 4 in Tripathi).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify RAAF with the teachings of Tripathi by including use of decoding packets. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of decoding packets would have provided a means for determining whether a packet was successfully received or not (407 in Figure 4 in Tripathi).

35 U.S.C. 103(a) rejection of claims 29 and 42.

Lines 6-9 on page 10 of RAAF teach that the retransmission data packet is transmitted at a power level lower than required for its transport format when the power required for its its transport format exceeds the maximum power level for the UE.

35 U.S.C. 103(a) rejection of claims 30 and 43.

Lines 6-9 on page 10 of RAAF clearly suggest decreasing the calculated gain factor of the physical channel to be used for transmitting the retransmission data packet, in case the transmission power required for transmitting the retransmission data packet and the other data within the same transmission time interval exceeds the maximum transmission power the user equipment is allowed to use.

35 U.S.C. 103(a) rejection of claims 31 and 44.

Lines 6-9 on page 10 of RAAF clearly suggest using a decreased gain factor corresponding to the maximum transmission power of the user equipment when the calculated gain factor of the physical channel exceeds the maximum transmission power.

35 U.S.C. 103(a) rejection of claims 32 and 45.

Lines 6-9 on page 10 of RAAF clearly suggest using a decreased gain factor corresponding to the maximum transmission power of the user equipment when the calculated gain factor of the physical channel exceeds the maximum transmission power.

35 U.S.C. 103(a) rejection of claims 33 and 46.

Lines 24-59 on page 5 of RAAF teach that power level control is a physical layer parameter.

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35 U.S.C. 103(a) rejection of claim 37.

Paragraph [0009] on page 4 of RAAF teaches that the PRACH commence at the start of a frame prior to the P-CCPCH frame.

35 U.S.C. 103(a) rejection of claim 38.

Step 8 and 9 in lines 53-58 on page 3 of RAAF teach that retransmission occurs after processing the feedback message.

35 U.S.C. 103(a) rejection of claim 50.

Abstract in Tripathi.

Claims 34 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over RAAF, BERNHARD (EP 1198076 A1) in view of Tripathi; Vinayak et al. (US 6671849 B2, hereafter referred to as Tripathi) in further view of Miyakoshi, Daisuke et al. (US 20020147819 A1, hereafter referred to as Miyakoshi).

35 U.S.C. 103(a) rejection of claims 34 and 47.

RAAF and Tripathi substantially teaches the claimed invention described in claims 28-33 and 41-46 (as rejected above).

However RAAF and Tripathi do not explicitly teach the specific use of MAC-d and MAC-e in the transport layer or transport format selection.

Miyakoshi, in an analogous art, teaches use of MAC-d and MAC-e in the transport layer or transport format selection (paragraph [0219] on page 14 in Miyakoshi teaches MAC-d for uses in selecting encryption for the transport format in the transport layer and paragraph [0305] on page 19 in Miyakoshi teaches MAC-e for uses in selecting encryption for the transport format in the transport layer).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify RAAF and Tripathi with the teachings of Miyakoshi by including use of MAC-d and MAC-e in the transport layer or transport format selection. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of MAC-d and MAC-e in the transport layer or transport format selection would have provided easy method for setting parameters in a wireless communication system (paragraph [0010] on page 1 in Miyakoshi).

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over RAAF, BERNHARD (EP 1198076 A1) in view of Tripathi; Vinayak et al. (US 6671849 B2, hereafter referred to as Tripathi) in further view of Antonio; Franklin P. (US 6426960 B2).

35 U.S.C. 103(a) rejection of claim 39.

RAAF and Tripathi substantially teaches the claimed invention described in claim 41 (as rejected above). In addition, RAAF teaches determining whether the resources

allocated to the mobile terminal are sufficient to transmit the retransmission data packet after said predetermined time span and other data within the same transmission time interval, wherein the data pending transmission has a higher transmission priority than the retransmission data packet (lines 24-39 on page 8 and paragraphs [0021]-[0022] on page 10 of RAAF).

However RAAF and Tripathi do not explicitly teach the specific use of postponing the transmission of the retransmission data packet to a later transmission time interval.

Antonio, in an analogous art, teaches use of postponing the transmission of the retransmission data packet to a later transmission time interval (Abstract in Antonio).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify RAAF and Tripathi with the teachings of Antonio by including use of postponing the transmission of the retransmission data packet to a later transmission time interval. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of postponing the transmission of the retransmission data packet to a later transmission time interval would have provided increased efficiency of channel usage (col. 2, lines 29-50 in Antonio).

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over RAAF, BERNHARD (EP 1198076 A1) in view of Tripathi; Vinayak et al. (US 6671849 B2, hereafter referred to as Tripathi) in further view of Antonio; Franklin P. (US 6426960 B2).

35 U.S.C. 103(a) rejection of claim 40.

RAAF and Tripathi substantially teaches the claimed invention described in claim 41 (as rejected above).

However RAAF and Tripathi do not explicitly teach the specific use of enhanced uplink dedicated transport channel (EUDCH).

Antonio, in an analogous art, teaches use of enhanced uplink dedicated transport channel (col. 4, lines 20-25 in Antonio).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify RAAF and Tripathi with the teachings of Antonio by including use of enhanced uplink dedicated transport channel (EUDCH). This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of enhanced uplink dedicated transport channel (EUDCH) would have provided increased uplink data rate (col. 4, lines 20-25 in Antonio).

Conclusion

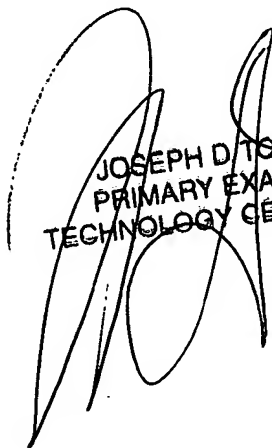
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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